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ABSTRACT

This bibliography contains citations locating information about the future U.S. work force. Because of demographic, economic, and technological developments, significant changes are predicted in both the nature of work and the composition of the work force by the year 2000. Projections, viewpoints, and suggested responses to these changes from governmental agencies, from the business community, and from educators are included in the bibliography. Also included are citations addressing the role of the educational system--particularly vocational education--in meeting the challenges of preparing the future work force. Citations in the bibliography include administrative material, books, information analyses, journal articles, opinion papers, reports, and statistical material. Materials for inclusion in the bibliography were located through the Florida Educational Information Service by searches of computerized retrieval systems, specifically the ERIC (Educational Resources Information Center) database, ABI/INFORM business database, Government Printing Office Publications Reference File, and MANAGEMENT CONTENTS database on DIALOG. Each reference contains title, date, developer, summary, format, and availability. (KC)

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Workforce 2000

A Bibliography

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Workforce 2000

A Bibliography

State of Florida
Department of Education
Tallahassee, Florida
Betty Castor, Commissioner
Affirmative action/equal opportunity employer

Division of Vocational, Adult, and Community Education

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Introduction

This bibliography contains information on the future American work force. Due to demographic, economic, and technological developments, significant changes are predicted in both the nature of work and the composition of the work force by the year 2000. Projections, viewpoints, and suggested responses to these changes from governmental agencies, from the business community, and from educators are included in this bibliography. Also included are citations addressing the role of the educational system—particularly vocational education—in meeting the challenges of preparing the future work force.

Citations in *Workforce 2000* include administrative material, books, information analyses, journal articles, opinion papers, reports, and statistical material.

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TITLE: ***Adjustments Needed in Vocational Agriculture Programs to Meet the Employment Needs of the Food and Fiber System in the Next Decade. A Position Paper.***

DATE: 87

DEVELOPER: National Association of Supervisors of Agricultural Education, Columbus, OH.

ANNOTATION: The image of the instructional program in vocational agriculture must be changed to reflect a scientific and futuristic nature. The future of vocational agriculture depends upon a willingness of the agricultural education profession to analyze current programs and adjust them to meet the changes of today's rapidly advancing biotechnology and information technology. Technological gains already achieved or just over the horizon include computerized monitoring, gene manipulation, robots, and computerized control of farm systems. Information technologies are predicted to reduce barriers for entry into production agriculture and to increase marketing efficiency. Basic plant and animal research, food and fiber processing, and agribusiness management and marketing are expected to provide the most significant employment opportunities. In contrast, graduates seeking positions in production agriculture, agricultural education, and agricultural communications will encounter strong competition for limited employment opportunities. Supervised occupational experience programs, Future Farmers of America, laboratory experiences, classroom instruction, and adult education must all be modernized to reflect this new image. A balanced combination of the traditional and a newly developed futuristic program of vocational agriculture must then be effectively marketed. (YLB)

FORMAT: Position Paper, 7p.

AVAILABILITY: For a microfiche copy of this document order ED286031 from FEIS.

TITLE: ***Basics and Principles of Education in a "Post-Industrial" Era.***

DATE: 85

AUTHOR: Schieser, Hans A.

ANNOTATION: A rethinking of the major concepts held about the post-industrial society presents educators with the challenge of translating research insights into the praxis of everyday life to improve students' employability. Forecasters of an "information society" where Americans engage only in services and communications forget that an insufficient number of specialists exist to support such an exclusive industry. The American school system, in contrast to those of other nations, ignores the necessity of realistic options for those unable to handle the abstract tasks of the "formal operations" stage of intellectual development. Reports explaining declining academic achievement do not get at the problem's roots: the historic behavioristic ideology of schools. "Industrial democracy," the integration of the worker in the decision-making process, is one attempt to counteract pervasive negative attitudes about work. A foremost task of educators and scholars is to make leaders aware of trends in society and new insights into human nature. A first step is the establishment of local councils of education with community members. America competes with other nations, whether characterized by conventional industry or "high tech." Avoiding the waste of unskilled, unemployable young people lacking positive work attitudes requires the ability to match theories with practice. (CJH)

FORMAT: Position Paper, 18p.

AVAILABILITY: For a microfiche copy of this document order ED271877 from FEIS.

TITLE: **"Beyond 'Trendy' Forecasts: The Next 10 Years for Work."**

AUTHOR: Levitan, Sar A.

JOURNAL: *Futurist*, v21 n6 p28-32 Nov/Dec 1987.

ANNOTATION: Four trendy forecasts, which are more popular than accurate, concern the U.S. workplace in the next 10 years. They are: (1) the U.S. is facing increased polarization of society because of the steady erosion of the middle class, (2) human labor will become less important as technology replaces people with machines, (3) removing government regulations from the marketplace will unleash the energies of the free market and increase productivity, and (4) the U.S. is about to enter a new era of labor-management harmony. The rejection of these ideas suggests that the workplace will not undergo radical changes between now and 1997. The supply of labor during the next decade will continue to grow despite reduced birthrates during the 1960s and 1970s. The labor force participation rate of young people will increase while older workers will stay in the work force longer. Women will continue to flock into the work force, and immigration also may swell the numbers of workers. The most significant change in the U.S. labor force has been its higher levels of education.

TITLE: ***The Bottom Line: Basic Skills in the Workplace.***

DATE: 88

DEVELOPER: Department of Education, Department of Labor, Washington, DC.

ANNOTATION: This booklet provides guidelines for setting up workplace programs to strengthen employee basic skills. It is intended to help employers who are contemplating the establishment of basic skills training programs and those with programs already in place who seek to improve their current designs. Part I addresses the basic skills problem in the workplace, the need to meet workplace literacy demands, and how to build a literate work force. Part II focuses on how to identify workplace literacy problems. Guidelines are provided on how to conduct a literacy audit. Part III presents the methodology for solving workplace literacy problems through implementation of a training program. It covers these steps: designing the training program, setting goals, assessing available resources, recruiting trainees, working with partners, building the curriculum, and evaluating the program. Part IV contains a listing of references and suggested readings, as well as brief descriptions and addresses for additional sources of information. (YLB)

FORMAT: Administrative Material, 57p.

NOTE: Introduction by William J. Bennett.

AVAILABILITY: For a microfiche copy of this document order ED291922 from FEIS.

TITLE: ***Bureau of Labor Statistics Employment Projections: Detailed Analysis of Selected Occupations and Industries. Report to the Honorable Berkley Bedell, United States House of Representatives.***

DATE: 85

DEVELOPER: General Accounting Office, Washington, DC.

ANNOTATION: To compile its projections of future employment levels, the Bureau of Labor Statistics (BLS) combines the following five interlinked models in a six-step process: a labor force model, an econometric model of the U.S. economy, an industry activity model, an industry labor demand model, and an occupational labor demand model. The BLS was asked to perform two sets of computer simulations in order to show the relative impacts of five determinants—gross national product (GNP), demand distribution, productivity, input-output coefficients, and staffing pattern ratios—on the 1995 BLS employment projections. In the first set of simulations, one determinant at a time was assigned its 1995 projected value, while the others were held constant at their 1977 values. In the second set of simulations, BLS was asked to reverse the procedure used for the first set, to use 1982 as the benchmark year, and to make the analysis for all workers rather than solely for wage-and-salary workers. The results of these simulations suggested that labor productivity is likely to increase substantially and that changes in input-output coefficients will increase the demand for labor in the industries examined. Attachments to this report include a detailed explanation of the BLS employment forecasting system and tables summarizing the results of the two sets of simulations. (MN)

FORMAT: Research Report, 80p.

AVAILABILITY: For a microfiche copy of this document order ED256899 from FEIS.

TITLE: **"The Changing Face of the Work Force."**

AUTHOR: Otto, Luther B.

JOURNAL: *Journal of Cooperative Education*, v22 n2 p16-25 Win 1986.

ANNOTATION: The author provides demographic information relevant to the changing structure of the labor market and the changing distribution of workers. These shifting demographics have significant implications for the demands that will be placed on cooperative education programs in the future. (Author/CT)

TITLE: ***A Colloquium Review of Re-Inventing the Corporation (Hagerstown, Maryland, May 15, 1985).***

DATE: 86.

AUTHOR: Clatterbaugh, John S., Jr.; And Others.

ANNOTATION: This collection contains five papers dealing with trends in changes in the structure and labor needs of corporations in the information age. The introduction, by Ronald A. Kepple, outlines 10 points for reinventing the corporation in the information age and reviews them in the context of the community college. Forces that are converging to take corporate decision making out of the hands of management are discussed in Thomas W. Dwyer's paper "Revolution in the Workplace." "Needed Skills for the New Information Society," a paper by John S. Clatterbaugh, Jr., examines the feasibility of modifying the current educational system to address a new set of skills, in addition to the "back to basics" skills required in the job market of the new information society. Brenda J. McGolerick discusses the strategies developed by various corporations and educational institutions to reduce health care costs in a paper entitled "Health, Women, and the Information Society Corporation." In the final paper, "Summary and Conclusion," Ronald A. Kepple reviews the main points of the aforementioned papers and discusses why a seller's market will exist in the information society. (MN)

FORMAT: Conference Proceedings; Evaluative Report; 21p.

AVAILABILITY: For a microfiche copy of this document order ED272683 from FEIS.

TITLE: ***The Context and Characteristics of Postsecondary Vocational Education Curriculum in the Year 2000: Implications for Policy.***

DATE: 87.

AUTHOR: Pucel, David J.; And Others.

DEVELOPER: Minnesota Research and Development Center for Vocational Education, Minnesota University, St. Paul, MN.

ANNOTATION: A study developed a vision of postsecondary vocational-technical curriculum that would be appropriate for the social context expected in the year 2000. Three substudies had their own research methodologies, data gathering, and conclusions. The first substudy identified categories, called determinants, of societal changes that might affect future postsecondary vocational education and assumptions regarding those determinants. It provided an assumed context within which postsecondary vocational education will operate. The second substudy identified categories of curriculum characteristics that could be used to define specifically a desired curriculum and about which decision makers must make choices. The third substudy gathered data from key decision-making groups regarding their perceptions of curriculum characteristics that would be desirable for Minnesota's area vocational-technical institutes in 2000 and described differences among the perceptions of those groups. The study developed (1) assumptions about the future social context of postsecondary vocational education, (2) a list of characteristics that can be manipulated to adapt a curriculum, and (3) a scenario for the future based on those assumptions and characteristics. The curriculum futures questionnaire and analysis summary are appended. (YLB)

FORMAT: Research Paper; 125p.

AVAILABILITY: For a microfiche copy of this document order ED288086 from FEIS.

TITLE: **"Coping with the Labor Shortage"** (retaining employees at entry-level positions)

AUTHOR: Feuer, Dale.

JOURNAL: *Training: The Magazine of Human Resources Development*, v24 n3 p64 March 1987.

ANNOTATION: The U.S. Bureau of Labor Statistics predicts a 20 percent drop in the number of 16- to 24-year-olds in the work force by 1995. This age group represents the traditional employee pool for entry-level jobs, particularly in the fast food industry. Coupled with low unemployment in some regions, the decrease in available entry-level employees has spurred employers to increase recruiting efforts, raise starting salaries, improve work environments, offer more management training opportunities, provide English classes to immigrants, and provide transportation assistance. Employers are also looking for homemakers, retired people, and other nontraditional demographic groups to fill entry-level positions. Service-oriented companies will have to reduce their high employee turnover rates to cope with the worker shortage.[1]

TITLE: **"Desk Jobs: Marketing the Information Age"** (includes related article on the information age)

AUTHOR: Gordon, Jack.

JOURNAL: *Training: The Magazine of Human Resources Development*, v24 n12 p37 Dec 1987.

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ANNOTATION: The current era is frequently called the information age or the information society and predictions about what this means for the future abound. It is unlikely that it is possible to predict what will happen. Society is already in a state of flux, and it is likely to stay that way indefinitely. The information society will require continuous worker reeducation and retraining. If people are liberated from dull, repetitious, physical labor, that does not necessarily mean they will gratefully seek office jobs, which is the current assumption.[2]

TITLE: **"Educating the Postindustrial Workforce."**

AUTHOR: Sbaratta, Philip.

JOURNAL: *Community College Review*; v14 n1 p16-21 Sum 1986.

ANNOTATION: Suggests the development of relationships with business/industry as an area for fruitful community college expansion. Identifies trends related to education, women's employment, the "me generation," immigration, technology, motivation, and work-life quality that will affect adult education planning. Offers recommendations and cites exemplary programs for educating the postindustrial work force. (DMM)

TITLE: ***Educational Requirements for New Technologies: Visions, Possibilities, and Current Realities.***

DATE: 86.

AUTHOR: Levin, Henry M.; Rumberger, Russell W.

DEVELOPER: Spencer Foundation, Chicago, IL.

ANNOTATION: The debate over the nature of effects that new technologies will have on job skill requirements has consequences for public policy and education. Much of the controversy over how to prepare students for the workplace of the future arises because different questions are being addressed. This report examines the disparate visions and disagreements over current realities and trends, including, for example, the assumption that new technologies with heavy reliance on microcomputers will require an increasingly technical work force. These forecast disagreements suggest a lack of harmony with respect to a shared vision rather than flaws in the forecasts themselves. Policymakers must explore ways of altering current trends in order to pursue a course where technologies expand employment possibilities, raise skill requirements, and fully utilize education of the work force. Three types of public policies can assist this task. Increased research on possibities and their consequences should be encouraged. Second, employers, unions, workers, and government agencies can be informed about these alternative possibilities and consequences. Third, education should assume a more proactive role, responding not only to needs of the workplace with such goals as technological literacy but also assuming the power to shape them. Two tables and 41 references are appended. (CJH)

FORMAT: Research Paper, 32p.

AVAILABILITY: For a microfiche copy of this document order ED271836 from FEIS.

TITLE: ***Education and Jobs in a Technological World.* Information Series No. 265.**

DATE: 84.

AUTHOR: Levin, Henry M.

DEVELOPER: National Center for Research in Vocational Education, Ohio State University, Columbus, OH.

ANNOTATION: A pressing problem in the United States today is that of employment: how to create enough jobs and, especially, what impact high technology will have on present and future jobs as well as educational need. Some policymakers see high technological industries as the basis for revitalizing the economy. The major challenge to education and training, according to this view, is to prepare adequate numbers of people with required high-level skills and to upgrade the present skill requirements of occupations. In this view, more, better, and more-specialized education is needed. In contrast to these persons are those who predict that the effects of high technology on employment will be modest in both the number of jobs created and the skill level required, and that high technology will downgrade skill requirements of existing jobs as well as displace workers already in jobs. Furthermore, the labor force will not require expanded science and mathematics or computer literacy but will be employed in low-level service occupations. According to this view, the relatively small number of workers who will require higher-level skills will be able to obtain them through existing higher educational channels. In our view, what is needed is a comprehensive approach enabling persons to obtain the types of education and training that they need throughout their working lives. Such an approach, called recurrent education, would (1) respond to emerging educational needs, (2) cover a wide range of opportunities, and (3) by establishing a wide range of finance and information, allow persons to undertake a variety of educational and training experiences over a lifetime. Such a system should be a top priority for this country. (KC)

FORMAT: Position Paper, 36p.

AVAILABILITY: For a microfiche copy of this document order ED240383 from FEIS.

TITLE: ***Education for the 21st Century.***

DATE: 85.

AUTHOR: Cross, K. Patricia.

ANNOTATION: Ways that higher education can best contribute to the quality of life in the twenty-first century are discussed. While higher education is coping with an anticipated lowered demand for traditional services, new educational functions are being assumed by corporations, professional associations, and other noncollegiate providers. Industries provide continuing education for employees because they cannot find viable providers through academic sources. Colleges should be addressing whether and to what extent they wish to serve the industrial sector. Colleges need to question their role (e.g., human development, intellectual growth, academic achievement, career development) and what population is served (e.g., age groups, employers). Industry seems to have adopted the broadest possible goal for their education and training divisions: the development of human resources. The future will require a skilled, adaptable, and innovative labor force and a more flexible, less hierarchical organization of work. Higher education needs to prepare students for active and continuous involvement in their own lifelong education. Students need cognitive skills, motivation, and self-direction. Implications of the current information explosion and skills employers seek in graduates are also considered. (SW)

FORMAT: Conference Paper; Position Paper; 25p.

AVAILABILITY: For a microfiche copy of this document order ED262691 from FEIS.

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TITLE: ***Education for Tomorrow's Vocational Teachers. Overview.* ERIC Digest No. 67.**

DATE: 87

AUTHOR: Harrison, Cheryl

DEVELOPER: ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus, OH

ANNOTATION: Being an effective vocational teacher today means having knowledge and/or experience in four areas: a specific skill area; instructional planning, implementation, and evaluation; classroom and laboratory management; and occupational experience. Tomorrow's vocational teachers will need to be competent in all of these areas, but they will also need to develop skills in areas that may seem distant from their primary teaching duties. The need to help students develop employability skills and higher-order thinking skills is becoming more evident. Vocational teachers will be called upon with increasing frequency to address individual needs in their classroom. Teachers will have to manage experiential learning programs, both in and out of the classroom. Teachers will likely be expected to become more involved in public relations work, and they will face increasing demands from the standpoint of keeping up to date in their specialties and professional development. The Holmes Group report, "Tomorrow's Teachers," and the Carnegie Forum report, "A Nation Prepared: Teachers for the 21st Century," have outlined similar proposals for reforming teacher education. Many of these proposals (for example, creating a national board of standards and relating teacher incentives to student performance) have raised serious debate. Regardless of the outcome, it is likely that change in vocational teacher education will come about not only because of the reform reports but also because of other pressures within the education community. The final effects of the reform movement will likely be felt in the next decade. (MN)

FORMAT: Information Analyses; 4p.

AVAILABILITY: For a microfiche copy of this document order ED289998 from FEIS.

TITLE: **"The Education of the Renaissance Technician. Postsecondary Vocational-Technical Education in the South."**

DATE: 86

AUTHOR: Rosenfeld, Stuart A.

JOURNAL: *Foresight*, v4 n2 Fall 1986

ANNOTATION: The key to the survival of manufacturing industries in the South is the ability to innovate. Most of the responsibility for innovation rests on the technical skills of the labor force—not only the scientists and engineers who design the technologies but also the employees who ultimately will have to work with and understand the new technologies. In order to acquire these skills, potential technicians need schooling beyond high school. The South's two-year postsecondary institutions are in an enviable position. These schools are among the best in the nation and are in the position to teach not only technical skills but also the critical thinking and problem-solving skills that will be needed by the "Renaissance" technician of the future who needs to keep up with everchanging technology. Four programs are models of the innovation and excellence that are needed by technical schools. These exemplary programs are (1) the Robotics Resource Center, Piedmont Technical College, Greenwood, South Carolina; (2) the Noble Center for Advancing Technology, Oklahoma State University, Technical Branch, Okmulgee, Oklahoma; (3) the program in biomedical equipment technology at Stanley Technical College, Albemarle, North Carolina; and (4) the Center for Productivity, Innovation, and Technology, Chattanooga State Technical Community College, Chattanooga, Tennessee. These programs represent the best of a certain type of technical education. Yet, there are still nagging questions related to goals, enrollment patterns and access, ability to measure and assess programs, and links to secondary vocational education. Planning to address these problems is needed to clarify and strengthen the two-year colleges in their role of preparing workers for the future. (KC)

FORMAT: Information Analyses; Project Description; 28p.

AVAILABILITY: For a microfiche copy of this document order ED278832 from FEIS.

TITLE: ***The Education, Training, and Work Experience of the Adult Labor Force from 1984 to 1995.***

DATE: 85

AUTHOR: Barnow, Burt S.

DEVELOPER: National Commission for Employment Policy (DOL), Washington, DC.

ANNOTATION: This study describes the overall composition and characteristics of the adult labor force at present and over the next 10 years. Chapter 1 presents and discusses the size, demographic composition, and employment characteristics of the adult labor force. Chapter 2 provides a description and analysis of the educational attainment of the adult labor force, including analysis of English fluency and functional literacy of the labor force. Chapter 3 is concerned with training available to the adult labor force. Chapter 4 examines the work experience of the adult labor force for various demographic groups. Chapter 5 presents evidence on the occupational mobility of the adult labor force. Chapter 6 presents projections of the size and composition of the labor force over the next 10 years, as well as preliminary projections of educational attainment. Four major conclusions are provided in chapter 7: most adults are able to obtain employment, but a significant number of individuals, concentrated among blacks and Hispanics, face serious unemployment problems; the adult labor force is not static in nature; adult training and education are concentrated among those already doing relatively well in the labor market; and the employment situation for the adult force is likely to improve. Three topics for policy considerations are suggested. Appendixes include the methodology used to project educational attainment and a three-page bibliography. (YLB)

FORMAT: Research Report; 102p.

AVAILABILITY: For a microfiche copy of this document order ED263313 from FEIS.

TITLE: ***Employment Policies: Looking to the Year 2000.***

DATE: 86

DEVELOPER: National Alliance of Business, Washington, DC.

ANNOTATION: Over the next 10–15 years, the work force will change significantly in composition. The numbers of minority youth, high school dropouts, and teenage mothers—less well-educated segments of the population—will increase. Youth unemployment will rise, although the total number of youth will decline. Women, with their needs for child care and nontraditional employment, will account for the majority of labor force growth. The labor force will also be aging. At the same time, the workplace will change. From 5–15 million manufacturing jobs will be restructured, an equal number of service jobs will become obsolete. Disruptions from change will be great; the need for training and retraining will be significant. Business, public training institutions, school systems, private training institutions, and labor must work in partnership to provide the necessary education and

training. The public must see education, training, and retraining as a lifelong process, vital to their working lives. Public/private partnerships are necessary to create jobs in distressed areas. A new employment policy is needed that encompasses traditional public training programs as well as public education systems. New forms of governance should be considered. Public/private institutions at all levels should be strengthened. Business will have to assume greater responsibility in training the work force. (YLB)

FORMAT: Position Paper, 26p.

AVAILABILITY: For a microfiche copy of this document order ED277830 from FEIS.

TITLE: ***Extended Workforce Participation of Older Adults: Issues and Trends.***

DATE: 85.

AUTHOR: Armstrong, Laura M.

ANNOTATION: Demographic, social, and economic trends are pointing in the direction of increased work force participation for older adults. The four major forces responsible for change in work patterns are the changing work force, changing older people, economic forces, and social forces. These forces are mediated by social convention, especially the "retirement convention," which, however, is beginning to seem less and less appropriate. A recent policy study shows a majority of those 55 and older who still work would prefer to continue working. Population projections and social and economic trends argue for innovative approaches to the use of older workers and increased options for an extended working life. Because of the diversity of the clientele to be served, corporations, universities, and community service agencies can all be involved. Corporations can play roles in advocacy of employment for older workers, retraining, and development of older worker employment policies. Educational institutions can play a role in reversing negative biases, providing skills necessary to insure the continuing productivity of older workers, and meeting society's shifting educational needs. Like educational institutions, community service agencies have had a "leisure role." They can offer counseling, career counseling, and job-related training, and can support extended workplace involvement for older adults. (YLB)

FORMAT: Conference Paper; Position Paper; 24p.

AVAILABILITY: For a microfiche copy of this document order ED256965 from FEIS.

TITLE: ***Forces and Factors Likely to Influence Vocational Education: The Aging Population.***

DATE: 86.

AUTHOR: Lewis, Morgan V.; Norton, Lee.

DEVELOPER: National Center for Research in Vocational Education, Ohio State University, Columbus.

ANNOTATION: The aging of the population is one of the major influences on the environment in which vocational education operates. The number of people 65 and older will increase more slowly in the next 25 years than in the past. Improvements in working conditions, health care, and pension plans since World War II have made those who will be 65 by the end of the century healthier and more financially secure than previous generations of the elderly. Medical advances that should lead to sizeable increases (5 years or more) in the life expectancy of the elderly in this century are not likely. A significant proportion of those approaching age 65 express interest in working, usually on a part-time basis; however, labor force participation by males 55 and over has been declining steadily. These findings suggest that those elderly persons who are most likely to want and need vocational education are the poor and near-poor. The role that appears most appropriate for vocational education is to serve those who wish to work but lack skills. Appendixes to this report include a model of the major influences on vocational education, a list of the information sources scanned on a regular basis during this study, and seven pages of references. (MN)

FORMAT: Information Analyses, 89p.

AVAILABILITY: For a microfiche copy of this document order ED266319 from FEIS.

TITLE: ***The Fourth R: Workforce Readiness. A Guide to Business-Education Partnerships.***

DATE: 87.

DEVELOPER: National Alliance of Business, Washington, DC.

ANNOTATION: This guide is intended to explain the types of partnerships that business can form with education to prepare students to enter and make a successful adjustment to the demands of the workplace. The first chapter discusses the consequences for business of an ill-prepared work force and examines the issues of the quantity and quality of workers, with special attention to the problems posed by the dwindling entry-level work force and the increasing mismatch between workplace needs and worker skills. The return on business investment in education (including development of a literate and better-trained work force, a better business climate in the community, and a better national competitive edge in the global marketplace) are examined next. The third chapter, which is a case study in the development of a business-education partnership, outlines the history, outcomes, and lessons learned from the Boston Compact (a school-business partnership that was formed to improve attendance, reduce the dropout rate, improve performance levels, and increase college and job placement rates among students enrolled in Boston's public schools). Multilevel partnerships as well as partnerships in policy, systemic educational improvement, management, teacher training and development, the classroom, and special services are explained. Assessing community needs and building a school-business partnership are the focus of the final chapter. Appendixes include selected partnership profiles, an index of programs referred to, and selected references and lists of associations and organizations. (MN)

FORMAT: Administrative Material; 61p.

AVAILABILITY: For a microfiche copy of this document order ED289045 from FEIS.

TITLE: **"The Future Is Made Now"** (the U.S. Department of Labor's Workforce 2000 Project).

AUTHOR: Halcrow, Allan.

JOURNAL: *Personnel Journal*; v67 n3 p12 March 1988.

ANNOTATION: The U.S. Department of Labor's Workforce 2000 Project maps labor market trends and recommends strategies for dealing with them. Exec. Dir. Kelley Andrews discussed Workforce 2000 at the Personnel '87 conference, noting that the U.S. could become a two-class society where one class is educated and skilled with unlimited employment potential while the other is uneducated and without skills and therefore unemployable. Supplying skilled labor in the future will be complicated by immigrants lacking English language skills and the fact that the work force is aging, since older workers often cannot or will not learn new skills. A five-point plan of solutions recommended by Workforce 2000 suggests expanding work force size, enhancing employee skill levels, improving pro-

ductivity, increasing flexibility, and improving employees' feelings of security and well-being.[3]

TITLE: **"Future Shock: The American Work Force in the Year 2000."**

AUTHOR: Brock, William E.

JOURNAL: *Community, Junior, and Technical College Journal*, v57 n4 p25-26 Feb-Mar 1987.

ANNOTATION: Reviews forecasts about demographics and the labor force in the year 2000, predicting a skill shortage rather than a labor shortage, with more unqualified people competing for the very few low-skilled jobs. Underscores education's role in reducing functional illiteracy, dropout rates, and youth unemployment. (DMM)

TITLE: **"The Growing Imbalance between Education and Work."**

AUTHOR: Rumberger, Russell W.

JOURNAL: *Phi Delta Kappan*, v65 n5 p342-46 Jan 1984.

ANNOTATION: Although many recent reports on the United States educational system urge increased investment in education to prepare students for the jobs of a high-tech future, a more immediate problem is that of the large proportion of the labor force, which is currently "overeducated" or "underemployed." (JBM)

TITLE: ***Guess Who's Coming to Work. Occasional Paper No. 116.***

DATE: 86.

AUTHOR: Hodgkinson, Harold.

DEVELOPER: National Center for Research in Vocational Education, Ohio State University, Columbus, OH.

ANNOTATION: Demography is clear about present cohorts; the future will include the same cohorts—only older. However, uncontrollable external forces are going to be dominant in determining America's destiny. To be effective the nation must respond quickly to these changes: the shift from a manufacturing to a service economy, an increasing number of minorities, and increased immigration. Interesting changes are consequently emerging in post-high school people and educational programs. Business has created a large postsecondary education system, corporations run colleges, and a large portion of the middle-age population is being educated. Three demographic factors that must be considered as they relate to the work setting are a potential worker's age, region, and race. Baby boomers are the most important age group, and a middle-aged society is emerging. The Sunbelt is characterized by increased youth populations, and a much higher proportion of the youth cohort is nonwhite. The Midwest is aging rapidly. Blacks are concentrated in the Southeast, Hispanics in the Southwest. The economy is moving toward a work force of a few highly paid executive and professional people and a large group of low-level service workers. The issues surrounding the "declining middle" are vital. (YLB)

FORMAT: Position Paper, 25p.

AVAILABILITY: For a microfiche copy of this document order ED269646 from FEIS.

TITLE: **"How Should We Educate Workers for the Future?"**

AUTHOR: Tucker, Marc S.

JOURNAL: *Change*; v16 n5 p26, 37-38 Jul-Aug 1984.

ANNOTATION: The U.S. cannot have an economy based on high levels of expertise without a labor force that is expert and broadly enough educated to move easily from challenge to challenge, from one area of expertise to another. A labor force is needed that is creative, knowledgeable, and flexible. (MLW)

TITLE: **"How Undergraduates Picture Their Work Lives in the Year 2000: Data for Curriculum Development."**

AUTHOR: Blinn, Lynn Marie; Pike, Gary R.

JOURNAL: *Journal of Vocational Education Research*; v11 n3 p49-68 Sum 1986.

ANNOTATION: Data are organized according to age, race, gender, marital status, and geographic region of the country. The research also makes recommendations for vocational education curriculum and instruction to foster effective futuristic thinking skills and develops a methodology to be used to investigate further how individuals perceive the future. (Author/CT)

TITLE: ***Human Capital Formation in the Post Industrial Society.***

DATE: 85.

AUTHOR: Collins, Paul D.

ANNOTATION: Entropy is defined as that condition in which the lack of order, information, and energy prevent useful work. What does vocational education contribute to the order, information flow, and useful work in industry and society? Is vocational education the appropriate method for extracting meaning, providing new information, new order, and new life in a society that may be sliding into catastrophic, irreversible entropy? Often, vocational education offers not a general preparation for life but narrow skill training for occupations that are soon obsolete. This training often excludes what it is convenient not to know, is controlled by conventional thinking that is hostile towards the new, and is a captive of established structures whose goal is simplification and convenience. New approaches to vocational education are necessary for survival. Vocational educators must generalize skills, develop a common set of attitudes, foster common expectations, and teach curriculum commonalities. These needs are all connected by complexity, organization, separability, continuity, sequentiality, interdependence, and self-regulation. These factors are all connected, and should be taught that way. (KC)

FORMAT: Conference Paper; Position Paper; 8p.

AVAILABILITY: For a microfiche copy of this document order ED265365 from FEIS.

TITLE: **"The Human Resources Function and the Growing Company."**

AUTHOR: Arthur, Diane.

JOURNAL: *Personnel*, v64 n11 p18-24 Nov 1987.

ANNOTATION: As an organization grows, it is necessary that the human resources (HR) function grow with it. There are many changes that HR professionals can expect to take place. They must study these changes to deal with them properly. For example, technology will continue to cause employee displacements and changes in the type of work performed. The capabilities of automated HR information systems will enable professionals to expand their analyses of important areas. Moreover, the work force of tomorrow will be older. Attitudes toward older workers are changing as organizations acknowledge the value of these employees. In the benefits area, workers will be expected to pay more of their own benefits, and in the legal area, the employment-at-will doctrine will fade and be supplanted by the principle of right to employ-

[3]MANAGEMENT CONTENTS® DATA BASE, COPYRIGHT 1988, INFORMATION ACCESS COMPANY, FOSTER CITY, CALIFORNIA 94404

ment. In the training area, the focus will be on training the whole person rather than concentrating on external behavior only. Assessing broad-based human resources trends and the needs of the company will help determine when and how to revamp the HR function. Charts.

TITLE: **"The Impact of Technology on the Work Force."**

AUTHOR: Braden, Paul V.

JOURNAL: *Community, Technical, and Junior College Journal*; v58 n3 p24-29 Dec-Jan 1987-88.

ANNOTATION: Examines factors affecting the nation's present and future work force: rapid technological advancements; other nations' use of advanced technologies and industrial targeting strategies; demographic factors; and changing values in the workplace. Sees needs for lifelong skills retraining, efforts to ensure industrial competitiveness, new technology-based training, and the management of change. (DMM)

TITLE: ***Impact on Technology: Evolving Directions on the International Scene.***

DATE: 87.

AUTHOR: Ryan, Ray D.

ANNOTATION: Not only are economic, political, social, and technological changes occurring constantly throughout the world, but the rate at which they are occurring is increasing rapidly. The everincreasing pace of technological change is especially evident in transportation and computer technology, both of which have brought the different ends of the earth closer together than ever before. The time has come to resist political pressures to raise and lower curriculum standards and to realize that the developed nations of the world (the United States and Western Europe) share common interests with the developing nations of Asia, Latin America, and Africa. Education's "return to basics" must not be at the expense of the job training that is needed to meet changing business needs. Vocational and technical education teachers must endeavor to create a new kind of worker—the "knowledge worker." Knowledge workers are workers who, because of their increased problem-solving skills, adapt easily to group settings, are more innovative than other workers, possess a high level of self-motivation and self-esteem, and exercise some choice over their work methods and work environments. Although knowledge workers do not require specific degrees with a specific number of units in a content area, they must know how to think, evaluate, cooperate, change, and deal with changes. Today's teacher-centered classrooms must give way to student-centered laboratories that will focus on leadership, multi-job, participatory, job-specific, and company-specific skills. (MN)

FORMAT: Conference Paper; Position Paper; 9p.

AVAILABILITY: For a microfiche copy of this document order ED290044 from FEIS.

TITLE: **"Industrial, Occupational, and Adult Education Programs: A Scenario of 2001."**

AUTHOR: Young, D. R.

JOURNAL: *Canadian Vocational Journal*; v22 n4 p19-21 Feb 1987.

ANNOTATION: The author depicts society, industry, and professional education in the year 2001. Predictions about the labor force, the economy, and distance education are included. (CH)

TITLE: ***Influences on Higher Education in the Knowable Future.***

DATE: 87.

AUTHOR: Lorenzo, Albert L.

ANNOTATION: An overview is provided of the future impact on the postsecondary educational delivery system triggered by projected changes in demographics, technology, the economy, and lifestyles. To help institutions prepare for and adapt to future changes, the paper presents the following projections: (1) postsecondary education will be evaluated more frequently in terms of its ability to provide marketable skills; (2) the demand for nontraditional learning will increase; (3) more courses will have to be offered at the times and locations preferred by students; (4) the average age of the postsecondary learner will increase, reducing student mobility; (5) new "education return" programs will be designed as fewer associate and bachelor degree programs will provide lifelong employment guarantees; (6) the value of liberal arts courses for work force retention and advancement will be recognized; (7) students will seek course offerings based on institutional access and convenience, requiring a reduction in transfer barriers; (8) institutional costs will force colleges to narrow their focus and build new programs cooperatively; (9) diminishing student pools will lead to new courses to meet the short-term needs of the nontraditional college student; (10) institutions will emphasize image enhancement in order to increase the competitive opportunities of their graduates and secure greater public support; (11) employers will encourage more employees to undertake college-level work through tuition payment plans; (12) public pressure will force institutions to demonstrate program quality and relevance; (13) curriculum development and instructional delivery will require separate specializations; and (14) educational leadership systems will have to respond to organizational changes. (PAA)

FORMAT: Conference Paper; Position Paper; Project Description; 11p.

AVAILABILITY: For a microfiche copy of this document order ED282602 from FEIS.

TITLE: **"Into the 21st Century: Long-term Trends Affecting the United States."**

AUTHOR: Cetron, Marvin J.; Rocha, Wanda; Luckins, Rebecca.

JOURNAL: *Futurist*; v22 n4 p29-40 Jul/Aug 1988.

ANNOTATION: A list of 71 long-term trends affecting the U.S. has been compiled. Generally, the U.S. is expected to maintain a period of economic prosperity. While there may be a recession in 1990, the long-range outlook for the U.S. economy is good. Society will become increasingly knowledge-dependent, and there will be an increase in knowledge industries. Technology will increase in dominance in the economy and society. Educational trends include expanding education throughout society, with business playing a greater role in the process. The costs of education will continue to rise. Trends in the work force include increased specialization, further decline of the manufacturing sector, and a decline of unionization. There should be an increase in entrepreneurs. More women, blacks, and other minorities can be expected to enter the work force. There should be a growth of tourism and travel. Family trends include declining birth rates and a decrease in the number of divorces. The federal government is expected to decrease in size.

TITLE: ***Invest in Experience: New Directions for an Aging Workforce. An Analysis of Issues and Options for Business.***

DATE: 85

DEVELOPER: National Alliance of Business, Washington, DC ; SRI International, Menlo Park, CA

ANNOTATION: As demographic changes and new labor supply requirements develop in the years ahead, older workers are sure to become even more important to employers and to society as a whole. To date, most employers have just begun to formulate policies to manage an aging work force in a changing economy. Some firms, however, have begun to respond pragmatically to the realities of an aging society through the development of new policies and innovative programs designed to remove many of the potential barriers to older workers' participation in the labor force. Such firms have begun to work with other corporations and with community organizations to develop alternative work arrangements, provide appropriate benefits and compensation, offer education and training, initiate marketing and placement services, ease the transition to retirement, and encourage new employment opportunities for older workers outside the corporation. To meet the many challenges posed by an aging labor force, business must develop an increased recognition and understanding of the capacity of older persons to participate in the work force and must be willing to respond boldy to new demographic and work force realities. This report describes practical management objectives for using older workers, outlines key changes underway that make older workers an increasingly important issue for corporations today, analyzes potential barriers to using older workers, reviews specific employer initiatives to promote employment opportunities for older workers, and suggests some broader corporate strategies regarding older workers. (MN)

FORMAT: Position Paper; 31p.

AVAILABILITY: For a microfiche copy of this document order ED257974 from FEIS.

TITLE: **"It's Up to Us: Viewing the Unlimited Possibilities of New Technology."**

AUTHOR: Lambert, Roger

JOURNAL: *Wisconsin Vocational Educator*; v9 n1 p1, 16-17 Win 1984-85

ANNOTATION: The author examines the technological changes that are occurring in various job sectors. He investigates the past, looks at current conditions, and makes predictions about the effects technological growth will have on the job market in the next decade and in the twenty-first century. (CT)

TITLE: ***The Jobs Challenge: Pressures and Possibilities. A Report of the Jobs Panel of the Economic Policy Council of UNA-USA.***

DATE: 85

DEVELOPER: United Nations Association of the United States of America, New York, NY.

ANNOTATION: Technological, demographic, and competitive pressures have transformed the U.S. labor market and must be dealt with on a priority basis. The urgency of the problem can best be addressed by creating a national institution that is independent of government, business, and labor but that draws on all three sectors to develop a broad array of policies to generate greater educational and employment opportunities. Increasing the capacity of the American work force to adjust to the changing demands of the labor market will require a renewed financial and political commitment to education and training. Continuing education, training, and retraining must not be the sole province of the school system, but must become an integral part of business operations. Also imperative are more cooperative labor-management relations, including worker participation programs and cooperative initiatives in conjunction with government programs such as short-term unemployment compensation to facilitate job sharing. Priority must be given to effective management of human capital resources if the United States is to maintain an undiminished stature in global affairs. Appendixes to this report include descriptions and membership lists of the Economic Policy Council of the United Nations Association of the U.S.A. (UNA-USA) and annotated listings of UNA-USA Economic Policy Council, policy study, and multilateral project reports, as well as works included in the UNA-USA book series. (MN)

FORMAT: Information Analyses; Position Paper; 101p.

AVAILABILITY: For a microfiche copy of this document order ED269579 from FEIS.

TITLE: ***Jobs of the Future. Overview.* ERIC Digest No. 46.**

DATE: 85

AUTHOR: Naylor, Michele

DEVELOPER: ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus, OH.

ANNOTATION: Although 6 of the 20 fastest growing occupations are associated with high technology, only about 7 percent of all new jobs projected for the remainder of the century will be in high-tech areas. Bureau of Labor Statistics data indicate that far more job openings will occur in low- and entry-level occupations than in highly skilled or professional occupations. Many analysts feel that it is still impossible to assess the impact of high technology on the labor market of the future and it seems highly unlikely that individuals will be able to hold the same job for the 40 or 50 years of their working lives. Therefore, vocational educators should concentrate on providing students with sound training in the basic and transferrable skills, encouraging student participation in a system of recurrent or lifelong education, and developing a program of technological literacy education that would begin in the elementary grades and extend through the postsecondary grades. Most planners agree that, even at the postsecondary level, vocational educators should emphasize development of transferrable skills and should, for the most part, leave job-specific training to those industries hiring vocational graduates. (MN)

FORMAT: Information Analyses; 3p.

AVAILABILITY: For a microfiche copy of this document order ED259216 from FEIS.

TITLE: ***Labor Market Changes in the Next Ten Years. Issue Paper No. 4.***

DATE: 86

AUTHOR: Barnow, Burt S.

DEVELOPER: Department of Labor, Washington, DC.

ANNOTATION: Although projecting what the labor market will be like in 10 years is extremely difficult, it is useful to consider what is in store for the nation in terms of employment. In 1985, the civilian labor force of the United States averaged 115 million persons, with 8 million (7.2 percent) unemployed. Unemployment was much higher for young people and minority groups. It is expected that the labor force will grow by 15.6 million people between 1985 and 1995. The growth rate will vary considerably, however, among various demographic groups. The labor force is projected to be concentrated among prime-age workers, with a slightly higher median age than in 1984. The majority of growth is expected to result from increasing labor force participation by women. Employment opportunities will not change dramatically over the next 10 years. Although some professions will have substantial growth, the demand for labor among most profes-

sions will remain constant or increase slightly. Demand and supply should hold steady. One clear trend that is emerging is that persons entering the labor force have more years of schooling than those they replace. Although this fact should mean that workers are more adaptable to change in the workplace, this may not be the case, since the quality of schooling has declined. With the changes taking place in technology, the labor market needs more responsive educational institutions to meet the demands of the next 10 years and beyond. (KC)

FORMAT: Position Paper, 30p.

AVAILABILITY: For a microfiche copy of this document order ED271567 from FEIS.

TITLE: ***The Learning Community of the Future: Education and Training in the 21st Century.***

DATE: 87

AUTHOR: Groff, Warren H.

ANNOTATION: Institutions are created to fill societal roles. As society evolved from a primitive to an agricultural and then to an industrial stage, institutions were created to coordinate specialized functions. Education is the institution intended to provide the intellectual capital and the work force to drive the economy of a society. The United States is in a transition from an industrial society to a complex scientific and technological society based on communications and information technology. This new society will require more sophisticated intellectual capital and a work force that is skilled in new ways. These needs will demand the formation of new, expanded relationships between postsecondary education and the economy and society as a whole. Between now and the 21st century, education will face profound challenges. Education is the key to the formation of the intellectual capital that is needed to compete in the new global economy and to shape the future of the United States in world affairs. Reports on education indicate that the education industry must be improved at once. The question remains whether the requisite tools, intellectual capital, and will to redesign the education industry are available. (Author/LAL)

FORMAT: Conference Paper; Position Paper, 41p.

AVAILABILITY: For a microfiche copy of this document order ED280538 from FEIS.

TITLE: **"Learning for Life in Revolutionary Times: Imperatives for American Educators in a Decade of Techno-Economic Change."**

AUTHOR: Snyder, David Pearce

JOURNAL: *Journal of Studies in Technical Careers*, v9 n2 p91-101 Spr 1987

ANNOTATION: The author reports findings of his study "The Strategic Context of Education in America—1985 to 1995," which forecasts trends and developments that will affect American education. He recommends innovations in public education to support the transition to knowledge-based production. (Author/CH)

TITLE: **"A Look at Occupational Employment Trends to the Year 2000."**

AUTHOR: Silvestri, George T.; Lukasiewicz, John M.

JOURNAL: *Monthly Labor Review*, v110 n9 p46-63 Sep 1987

ANNOTATION: According to Bureau of Labor Statistics projections, there will be 139 million persons in the labor force in the year 2000; this represents a slowdown in the growth rate after 1986. Minority groups are expected to increase their representation in the labor pool. (CH)

TITLE: **"Looking Ahead: Jobs and Education in the Future."**

JOURNAL: *School Administrator*, v42 n1 p10-12 Jan 1985

ANNOTATION: Presents an interview with the three authors of a report on jobs and education in the future. Topics discussed include (1) job opportunities and salary differences in the 1990s, (2) the relationship between schooling and work, (3) attitude changes, and (4) changes in the character and structure of employment. (MCG)

TITLE: **"Looking Ahead: Trends in the Workforce and Job Training."**

AUTHOR: Jones, Robert T.

JOURNAL: *Management Review*, v77 n5 p46-48 May 1988

ANNOTATION: Major shifts are taking place in the U.S. economic base as the information sector grows in importance at the expense of the manufacturing sector. Labor demographics suggest that the future pool of available workers will be smaller and underprepared in basic workplace skills. Executives will find it to their advantage to help develop public policies that create human capital. Further, workplace policies will have to change to accommodate the growing numbers of women in the work force. Job dislocations need to be addressed with training programs. New types of partnerships offer a way to make the most of America's human resources. Also, business leaders' involvement in programs to help disadvantaged youths could result in creating future qualified workers.

TITLE: **"Meeting the Challenge of the New American Unemployment."**

AUTHOR: Crossland, Ronald J.; Milander, Henry M.

JOURNAL: *Community Services Catalyst*, v16 n3 p11-13 Sum 1986

ANNOTATION: Predicts changes in work force supply and demand. Looks at ways new technological delivery systems can be used to enhance lifelong learning and improve adult retraining/education. Reviews the Commission on Higher Education and the Adult Learner's recommendations, and projects ways technology will be used in innovative programs for adults. (DMM)

TITLE: **"The Nature of Work in a Changing Society."**

DATE: 85

AUTHOR: Best, Fred

JOURNAL: *Personnel Journal*, v64 n1 p36-42 Jan 1985

ANNOTATION: Influences on the future world of work are considered: values and world views, knowledge and skills, management and organizational norms, general economic conditions, investment and savings, availability of raw materials, economic competition, and technological developments. Also discusses the rate of change and where transitions are expected to happen at the fastest rate. (CT)

TITLE: **"New Directions and Trends in Industrial Training and Their Implications for Vocational Education Programs."**

DATE: 86

AUTHOR: Ashley, William L.; And Others

JOURNAL: *Facts & Findings*, v4 n3 Spr 1986

ANNOTATION: A basic position of industry is that it picks up where schools leave off. Training policy within industry is diverse in theory and practice. Companies vary in

their approach to training, ranging from highly informal to highly formal. The many new trends in industrial training may be analyzed in four dimensions: in-house education programs, educational and training facilities, degree-granting institutions, and satellite universities. Most employers responding to a National Center for Research in Vocational Education survey on trends in industrial training state that technology dictates the initial outline of training needs. Training was found to occur both in-house and at the customer's site. Popular training trends included teletraining, computer-based training, creative uses of videodiscs, touch-screen data entry techniques, increased use of adult education techniques, interpersonal and similar skills training, and small-group training. Vocational training programs for skilled workers must keep pace with the constantly changing needs of industry, help students develop preemployment qualifications, avoid adopting or clinging to provincial attitudes and practices that are inconsistent with the realities affecting firms hiring vocational graduates, and prepare workers to assume more responsibility for updating themselves as new technological developments and practices affect their occupations. (MN)

FORMAT: Information Analyses; 11p.

AVAILABILITY: For a microfiche copy of this document order ED272675 from FEIS.

TITLE: **"New Directions for Responding to a Changing Economy: Integrating Education and Work."**

AUTHOR: Charner, Ivan; Rolzinski, Catherine A.

JOURNAL: *New Directions for Continuing Education*; n33 p5-15 Spr 1987.

ANNOTATION: The authors discuss such societal changes as aging of the population, women and minorities in the labor force, decline of industry and growth of service jobs, and creation and elimination of jobs by technology. Within this context, they present strategies to integrate education and work to cope with change. (CH)

TITLE: ***New Technology Demands New Kinds of Training.***

DATE: 84.

AUTHOR: Zanardelli, Wayne R.

ANNOTATION: The changes brought on by modern technology and the information explosion it supports are revolutionary. The manufacturing industry has always had a commitment to new processes and new technology. Investment in improving productivity through the application of technology is, however, new to the office. Provision of training has become a major issue for which companies are especially unprepared. Filling the enormous hiring requirements created by the growth of technology, especially with the rapidly changing demographics of the work force, is one of the real challenges of the future. Much of the special training required will be done at proprietary business and technical schools that have a long and successful record of responding quickly to demands of the local employment scene, implementing new technology quickly, and producing highly qualified graduates in the shortest amount of time possible. Such schools are characterized by a deep concern for student needs and success, a teaching staff with industry experience, individualized placement, and emphasis on hands-on training; their graduates need only a short on-the-job learning period. Students are attracted by flexibility in programs, courses, and starting times. Private business schools are in a good position to work with industry to provide qualified personnel. (YLB)

FORMAT: Conference Paper; Position Paper; 11p.

AVAILABILITY: For a microfiche copy of this document order ED252736 from FEIS.

TITLE: ***The Next 6000 Days: A Perspective on Employment and Education for the 21st Century.***

DATE: 87.

AUTHOR: Avveduto, Saverio.

DEVELOPER: International Council on Education for Teaching, Washington, DC.

ANNOTATION: This volume evaluates the effects of contemporary issues and technological trends upon the nature of Western society's educational systems and its ability to cope with changes in employment. The work is a translation from Italian. Three chapters emphasize higher education and compulsory education's relationship to a future society of quality living. Chapter 1, "The Quality of the Future," describes employment and new technologies, industrial restructuring, and the readaptation necessary of the labor force. A model case of technological reconversion in an Italian firm is analyzed, which resulted in extensive layoffs. Conclusions include the point that the public sector does not offer retraining opportunities, which plays an important role in the turnover phenomenon. "The Near Future of Employment," Chapter 2, applies economic and projective theories to employment in the United States and Europe. Scenarios for Italy and the United States illustrate the projected growth of occupations in lower echelons and at the top, resulting in a blue and white "striped collar" phenomenon. The teaching profession reflects a need for knowledge of computer systems in all fields. Greater availability of total wealth along with growing social imbalances will return attention to equality of opportunity. Chapter 3, "What Should Be Done about the Future?" suggests that answers must be sought within educational research, and yet the results of such research have not been utilized to improve society as a whole. In speculating whether the school system is capable of satisfying future occupational needs, educators should consider a uniform postcompulsory education system to deter unemployment. Eventually, everyone must be guaranteed minimal knowledge to respond to the challenge of "new literacy." References accompany each chapter; 21 tables of projective data are appended. (CJH)

FORMAT: Book; Position Paper; 82p.

AVAILABILITY: For a microfiche copy of this document order ED285250 from FEIS.

TITLE: **"Overview and Implications of the Projections to 2000."**

AUTHOR: Kutscher, Ronald E.

JOURNAL: *Monthly Labor Review*; v110 n9 p3-9 Sep 1987.

ANNOTATION: Bureau of Labor Statistics projections show 21 million new jobs over the 1986-2000 period. Most new jobs will be in the service-producing industries. The Black and Hispanic labor force is estimated to increase much faster than that of whites. These projections have several important implications. (CH)

TITLE: ***Perspectives on Employment. Research Bulletin No. 194.***

DATE: 86.

AUTHOR: Freedman, Audrey.

ANNOTATION: There has been a long-term rise in the relative share of the total number of workers engaged in producing intangible goods or services. Since 1967, this shift to employment in the service sector has been accom-

modated by a relative decline in manufacturing. Other trends that have taken place over the last decades and are likely to continue are increases in the number of women in the work force, the number of smaller-sized families, and the economic dependence of the elderly. Productivity increases and technological advances in the manufacture and distribution of goods will continue to reduce labor force requirements. Jobs will, however, increase in the following areas: business services that are purchased by goods- and service-producing enterprises; point-of-consumption work, such as retailing and restaurants; and services geared toward caring for people, providing protection and security, and maintaining the quality of a crowded environment. Private investments by parents and by individuals on their own behalf comprise much of the nation's total human resource development activity. Government policy in the area of human resource development and intervention in labor market operations will also have a powerful effect on the labor market of the future. The growing trend toward the use of contingent employees is another area of concern. While contingent employees provide employers with a great deal of flexibility, the practice can result in greater unemployment for blue- and white-collar workers alike in times of recession. (MN).

FORMAT: Conference Paper; Position Paper; 16p.

AVAILABILITY: For a microfiche copy of this document order ED278817 from FEIS.

TITLE: ***Perspectives on the Education and Training System of the Future.* Information Series No. 312.**

DATE: 86.

AUTHOR: Groff, Warren H.

DEVELOPER: ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus, OH.

ANNOTATION: The mission of vocational education has always been to provide a skilled work force for society. As society and work evolve through the influence of demographic, social, economic, technological, and political changes, the essential purposes of vocational education must be made appropriate for the emerging advanced technical society. To devise scenarios for creating preferred alternative futures, a combination of three perspectives can be used. The futuristic perspective involves assessing society and work by forecasting what can be, what is likely to be, and what should be. In the holistic perspective, an audit of current conditions considers the implications of a global economy, international competition, and scientific advances for vocational education. The outcomes perspective is derived from research on outcomes of education that yields new criteria for evaluation of education and training. From these perspectives, alternatives can be developed involving increased or diminished emphasis on vocational education. Staffing the education and training system of the future thus revolves around such issues as vocational teacher supply and demand, recruitment, and retention. The transition to an advanced technical society necessitates the redesign of the education and training system through (1) policy targeted at research and human resource development, (2) leadership that can implement the concepts of strategic planning to create visions and preferred scenarios, and (3) cooperation of a broad range of institutions and education and training providers in the realization of these visions. A five-page list of references concludes the document. (SK).

FORMAT: Position Paper; 44p.

AVAILABILITY: For a microfiche copy of this document order ED272772 from FEIS.

TITLE: **"Preparing U.S. Workers for Change."**

AUTHOR: Brock, William E.

JOURNAL: *Business America*; v10 n9 p6-7 Apr 27, 1987.

ANNOTATION: To assure itself a prominent place in world markets, the U.S. must focus on productivity, education, skill training, research and development, labor-management relations, and economic policy. The Labor Department is concerned with helping American workers prepare for an economic environment that will be characterized by rapidly changing technology and shifting demands for goods and services. The Work Force 2000 Project, now under way at the Labor Department, has sketched a picture of future job and labor market trends. The U.S. economy is likely to continue to create new jobs, but if education and job training are not upgraded, American workers will not have the necessary skills to compete in world markets. New jobs will be concentrated in occupations requiring postsecondary skills. In the near future, the focus of the Labor Department will be on dislocated workers and young people in welfare families, with emphasis on literacy training and occupational skills. Business and labor must improve job-related education and training.

TITLE: **"Projections 2000."**

AUTHOR: Abramson, Elinor.

JOURNAL: *Occupational Outlook Quarterly*; v31 n3 p2-36 Fall 1987.

ANNOTATION: Presents a graphic summary of employment and other economic projections for the year 2000. Topics include (1) the labor force and projected changes in its composition, (2) economic growth, (3) expected changes in the industrial structure of the economy, (4) occupational employment, and (5) the education-work relationship. (CH)

TITLE: ***Projections 2000.***

DATE: 88.

DEVELOPER: Labor Dept., Labor Statistics Bureau.

ANNOTATION: Labor Statistics Bureau Bulletin 2302. Presents Bureau of Labor Statistics employment projections for the year 2000. Includes five articles reprinted from the Sept. 1987 issue of *Monthly Labor Review*, a brief review of the methodology, and the assumptions underlying the specific industry and occupational employment projections.

FORMAT: Information Analyses; 145p.

AVAILABILITY: Stock Number 029-001-02968-3, $7.50, available from Bureau of Labor Statistics, Chicago, IL or Superintendent of Documents, Washington, DC.

TITLE: ***Purpose of Vocational Education in the Secondary School: A Study Group.***

DATE: 85.

AUTHOR: Copa, George H.; And Others.

DEVELOPER: Minnesota Research and Development Center for Vocational Education, Minnesota University, St. Paul, MN.

ANNOTATION: This report presents selected quotations and major points representing the views of educators, policymakers, and specialists in the areas of economic and social development on the subject of the purposes of vocational education in the secondary schools. The material was collected during a year-long review of current studies of secondary schools, 20th-century perspectives on vocational education and its specific fields, the purposes of education in general, future social and economic forces, and key

concepts often used to define the purpose of vocational education. The volume is divided into eight parts. The importance of readdressing the purpose of vocational education in the secondary schools and the implications of current studies of secondary education are discussed. Examined in the next three sections are 20th-century perspectives on the purpose of vocational education; specific fields within vocational education (agricultural, business, distributive, home economics, and industrial education); and education in general. The implications of future economic, social, and technological trends for vocational education are outlined. The following key concepts are discussed in a section on developing a purpose statement for vocational education: development; individual differences; education; vocation; work; and the ethics, aesthetics, and epistemology of work. The final part reflects on the contribution to and unique purpose of vocational education in secondary education and the questions that should be asked about vocational education's purposes when deliberating on the needs of individual secondary schools. Each section includes selected quotations, a summary, and references. Concluding the volume is an epilogue by Harry F. Silberman. (MN)

FORMAT: Information Analyses, 190p.

AVAILABILITY: For a microfiche copy of this document order ED276850 from FEIS.

TITLE: **"Reaction to the Changing Workplace."**

AUTHOR: Lewis, Morgan V.

JOURNAL: *Journal of Industrial Teacher Education*; v23 n1 p36-39 Fall 1985.

ANNOTATION: While agreeing on balance with the four preceding articles on the changing workplace, the author cites some research that indicates that the net effect of technology is to lower skill requirements of jobs. Concludes that we will need a flexible, well-educated work force. (SK)

TITLE: **"A Reflection on Tomorrow's Labor Force."**

AUTHOR: Brock, William E.

JOURNAL: *Columbia Journal of World Business*; v20 n4 (Commemorative Issue) p95-97 1986.

ANNOTATION: A continuing capacity to accommodate an expanding and changing labor force through the creation of jobs is indicative of the U.S. economy's fundamental strength and dynamism. In the last 3 years, almost 10 million additional American workers have acquired jobs, most of which were found in the service industries. In addition, creation of the 15 million new jobs that the Bureau of Labor Statistics projects will be needed over the next 10 years clearly seems feasible. About 90 percent of this employment expansion is expected in service-producing industries. Future workers will need better education and training if the U.S. is to retain its leadership position in high-technology industries and services. The U.S. educational system needs to (1) return to an emphasis on fundamentals, (2) find ways to keep students in school, (3) adopt meaningful standards, and (4) develop positive character traits in students. Also, worker-related education must be an ongoing process.

TITLE: **"Reflections of a 1950s Youth at Risk."**

AUTHOR: Guiton, Bonnie.

JOURNAL: *Vocational Education Journal*; v63 n1 p20-21 Jan-Feb 1988.

ANNOTATION: Discusses the role of vocational education in preparing students to succeed in a changing society. The author uses her own life as an example. (JOW)

TITLE: ***Re-Visioning Vocational Education in the Secondary School. Papers Presented at the Symposium (St. Paul, Minnesota, May 8-9, 1986).***

DATE: 86.

AUTHOR: Copa, George H.; And Others.

DEVELOPER: Minnesota Research and Development Center for Vocational Education, Minnesota University, St. Paul, MN.

ANNOTATION: This document contains five papers presented at a symposium designed to identify and discuss implications of nationwide perspectives and research studies on vocational education. Following an introduction that explains the context of the presentations, the following papers are included: "Improving Secondary Vocational Education" (Harry F. Silberman); Discussion (Nan Skelton and Wes Tennyson); "Work, Vocational Studies, and the Quality of Life" (Arthur G. Wirth); Discussion (Cliff Helling, Frank Kenney, and Helen Henrie); "Major Issues in Vocational Education in the Year 2000" (Marvin Feldman); Discussion (Tom Peek, Glen Olson, and Frank Starke); "Beyond Tinkering: Reconstructing Vocational Education" (Jeannie Oakes); Discussion (William Gardner, Dayton Perry, and Jan Hively); and "Occupationally Specific Training in High School" (John H. Bishop); Discussion (Gordon Swanson, Daniel Mjolsness, and Don Szambelan). The final chapter, "Making Vocational Education Better for Students," presents a summary of the themes raised by symposium participants and presenters and a closing perspective providing recommendations for action. Symposium participants and program are listed in an appendix. (KC)

FORMAT: Conference Paper, 143p.

AVAILABILITY: For a microfiche copy of this document order ED279846 from FEIS.

TITLE: ***Secondary Vocational Education. Occasional Paper No. 119.***

DATE: 86.

AUTHOR: Kolde, Rosemary.

ANNOTATION: Vocational education for tomorrow must be an educational delivery system rather than a subject-matter content area. It must blend and interrelate the various areas to provide core competencies, employment skills, and employability skills in a truly integrated and comprehensive educational program. Academic and vocational education must not be placed in conflict with one another; rather, the secondary vocational curriculum should be redesigned in such a way as to allow for the extrapolation of academic competencies from the vocational curriculum. What is needed is an integrated curriculum approach focusing on the development of academic skills in an applied setting. The regional area vocational school is particularly suited to such a curriculum. Whether offered at a comprehensive high school or area vocational school, vocational education must place more emphasis on co-developing programs with local businesses and preparing students for the inevitable retraining that they will need throughout their working lives as the relentless pace of high technology reshapes the labor market every 5 to 10 years. Because vocational education is not a training program but rather an educational program preparing students to set the direction of their own lives and careers, it must integrate the job skills currently sought by employers with sound training in the basic skills, including technological literacy and career development skills. (MN)

FORMAT: Position Paper, 19p.

AVAILABILITY: For a microfiche copy of this document order ED273821 from FEIS.

TITLE: **"The Shape of Things to Come."**

AUTHOR: Choate, Pat; Linger, J. K.

JOURNAL: *Vocational Education Journal*, v61 n7 p26-29 Oct 1986.

ANNOTATION: The authors discuss current trends in technology, international trade, and demographics as these relate to the workplace. They also predict probable futures related to these topics and provide implications for educators. (CH)

TITLE: **"The Skill Gap: America's Crisis of Competence."**

AUTHOR: Feuer, Dale.

JOURNAL: *Training*, v24 n12 p27-35 Dec 1987.

ANNOTATION: Numerous business executives, management consultants, and labor economists point to a wide gap between the skills of U.S. job seekers and the skill requirements of today's jobs. While one of the fastest growing segments of the U.S. population is the economically disadvantaged and educationally deprived, broad occupational categories requiring the highest educational levels are projected to be the fastest growing ones between now and the year 2000. Debate continues over whether technological change actually is upgrading or downgrading the skill requirements of jobs, but a shift from physical to cognitive skill requirements is generally accepted. Workers today must be open to learning new skills and open to change. To close the skill gap, employers should (1) focus on computer, technological, and functional literacy; (2) boost their investments in training; and (3) establish a more direct link between workers' abilities and their pay. Participative management strategies are indicated for the future.

TITLE: ***Social and Economic Trends: 1985-2000. Commission Report 84-30.***

DATE: 84.

DEVELOPER: California State Postsecondary Education Commission, Sacramento, CA.

ANNOTATION: Major social and economic trends in American and California life that will affect California's colleges and universities during the next 15 years are identified. Characteristics of the information-based economy are examined, along with projections concerning the 40 fastest-growing jobs between 1982 and 1995. College and university research has provided the scientific bases for technological advancement and improvements in communications, transportation, and production. Attention is directed to private funding of higher education, continued economic growth in the United States, the federal deficit, balancing imports and exports, increased conservation of resources, present and projected sources of energy, and demographic and social trends. Social trends in the country include increasingly open lifestyles, less permanent family associations, greater personal anxiety, and a desire for instant gratification. The effects of these trends and demographic changes on postsecondary education include greater vocationalism and corporate involvement, increased emphasis on business and technology, a de-emphasis on the liberal arts and humanities, the relative growth of the public sector, and a larger number of transient students taking part-time programs. (SW)

FORMAT: Evaluative Report, 52p.

AVAILABILITY: For a microfiche copy of this document order ED256194 from FEIS.

TITLE: **"Tomorrow's Work Force: New Values in the Workplace."**

AUTHOR: Deutsch, R. Eden.

JOURNAL: *Futurist*, v19 n6 p8-11 Dec 1985.

ANNOTATION: A new generation of workers is entering the work force. The "computer babies," fiercely independent, will demand autonomy on the job and will brush aside many of the values of the older baby-boom generation. (RM)

TITLE: **"Training in the '90s."**

AUTHOR: Zemke, Ron.

JOURNAL: *Training*, v24 n1 p40-53 Jan 1987.

ANNOTATION: Human resources development of the future can expect a continuation of the same 4 factors that have influenced the past. First, the external social forces that have a dramatic impact on management practices include (1) unionization, (2) regulation, (3) litigation, (4) U.S. lifestyles, (5) consumerism, (6) the texture of the economy, and (7) global economy. The 2nd factor, the work force, will involve (1) aging of the work force, (2) increased workplace diversity, (3) changing educational levels, (4) changing values, (5) employee expectations, (6) supervisors' views, and (7) a new sense of loyalties. Third, the organization structure affects both content and delivery of training and also is influenced by (1) downsizing/delayering and (2) entrepreneurship/intrapreneurship. Last, technology—both hard and soft—will continue to affect the training field. Tables. References.

TITLE: ***The Triumph of Circumspection.***

DATE: 88.

AUTHOR: Collins, Paul D.

ANNOTATION: This conference presentation, which is divided into three parts, deals with problems facing the educational system, the concept of entropy and its relationship to vocational education, and the need to develop "technical generalists." The first part stresses the responsibility of the American school system in remedying the many social problems caused by poverty, unemployment, the aging of the U.S. population, and the social and economic costs of illiteracy. The second part recommends that vocational educators work to generalize skills, develop a common set of attitudes, foster common expectations, and teach curriculum commonalities. This can be accomplished through complexity, organization, separability, continuity, sequentiality, interdependence, and self-regulation. The third, and longest, part of this document explores the implications of the concept of entropy for vocational-technical education. A model is presented for restoring the public school system to a well-ordered, well-functioning state by providing a general and flexible form of vocational education that is used to train individuals to be more than specialists in a technical field. Rather, the proposed program would stress techniques for evaluating, transferring, and reinforcing knowledge to other areas. (MN)

FORMAT: Conference Paper; Position Paper; 58p.

AVAILABILITY: For a microfiche copy of this document order ED290059 from FEIS.

TITLE: **"2000: Labor Shortage Looms."**

AUTHOR: Semerad, Roger D.

JOURNAL: *Industry Week*, v232 n3 p38-40 Feb 9, 1987.

ANNOTATION: Comparison of the U.S. work force in 1985 and that projected for the year 2000 indicates that (1) new jobs will be in the service sector rather than in the goods-producing sector, (2) higher level skills will be required, (3) growth in the economy will favor the educated, and (4) the work force will be older, with more women, minorities, and immigrants. There could be a labor shortage by 2000, since the labor force will grow more slowly over the next 15 years than at any time since the Great Depression, perhaps opening employment opportunities for handicapped and displaced workers. Participation by people previously excluded will increase, including some who will be ill-prepared and may be without even basic skills. Strategic planning and training programs will be needed to instill the necessary work ethic to inspire employees to achieve. Workers must learn to be flexible and open to retraining for the purpose of job mobility. Tables. Graphs.

TITLE: ***2001: An Educational Odyssey.***

DATE: 85.

AUTHOR: Willard, Julia L.; Williams, James O.

ANNOTATION: This paper presents a concise overview of issues facing educators and their students now and within the next two decades. Issue areas discussed include the current status of professional teacher preparation, forces in the current debate, and projections for the future. Enrollment in teacher education programs and accreditation and certification are considered. These and other issues are reviewed in a future-oriented presentation of the educational odyssey of a student who enters the first grade in 1985 and will finish his academic programs at the beginning of the new millennium. (CB).

FORMAT: Conference Paper; Position Paper; 20p.

AVAILABILITY: For a microfiche copy of this document order ED271463 from FEIS.

TITLE: **"2001: Employment Odyssey or Opportunity for Persons with Handicapping Conditions."**

AUTHOR: Linari, Ronald F.; Belmont, Robert M.

JOURNAL: *Career Development for Exceptional Individuals*; v9 n1 p34-41 Spr 1986.

ANNOTATION: Implications of trends in population, families, communications, automation, the environment, and employment changes are noted for the training and employment of handicapped persons. The need for emphasis in vocational education on generalizability, job readiness and vocational adjustment skills, and job analysis is stressed. (CL).

TITLE: ***Underemployment from a Human Service Perspective.* Information Series No. 303.**

DATE: 85.

AUTHOR: Meyer, David P.

DEVELOPER: ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus, OH.

ANNOTATION: The issue of underemployment (a condition characterized by inadequate hours, inadequate income, and/or inadequate use of skills) is explored in this monograph. The methodology and vocabulary of underemployment are first examined, including a definition synthesis of hours worked, skill utilization, and compensation. The second section provides statistical measures of the incidence of underemployment for the following categories: part-time underemployed and populations at risk—farmworkers, women, youth, minorities, and college graduates. Among the causes of underemployment described in the third section are the effects of automation, trade deficits and increasing foreign competition, high military spending, reduced federal spending for retraining and enforcement of equal rights, increased employment of women, and declining union membership. Suggestions for career assistance specific to each type of underemployment are made. For those employed below skill level, recommendations are made for improved labor market information and public employment services and changes in the relationship of schooling and work. The part-time underemployed could benefit from national commitment to full employment, changes in work attitudes, job search skill training, and job creation. Employability programs and comparable worth legislation are suggested to aid the low-income underemployed. Finally, from two scenarios about the future of work the author draws implications for underemployment and predicts future directions for skill utilization and pay equity. A summary of positive and negative trends leads to a conclusion of guarded optimism that the problems of underemployment are solvable. (SK).

FORMAT: Information Analyses; 77p.

AVAILABILITY: For a microfiche copy of this document order ED260305 from FEIS.

TITLE: ***Visions for Change—The Context and Characteristics of Postsecondary Vocational Education Curriculum in the Year 2000: Implications for Policy.***

DATE: 88.

AUTHOR: Pucel, David J.; And Others.

DEVELOPER: Minnesota Research and Development Center for Vocational Education, Minnesota University, St. Paul, MN.

ANNOTATION: The purpose of a study was to develop a vision of the postsecondary vocational technical curriculum that would be appropriate for the social context anticipated in the year 2000. It was based on the premise that the curriculum is likely to be shaped by a number of groups of decision makers and will most likely include elements upon which those groups agree. The study developed assumptions about the future social context of postsecondary vocational education. A list of characteristics that can be manipulated to adapt the future curriculum was drawn up and organized in 10 categories (program needs assessment, program access, articulation among programs and institutions, program purpose, content identification, evaluation of student learning, program format, lesson structuring, learning resources, and program evaluation). Finally, a scenario of the probable future was developed, based on similarities and differences in the perceptions of the curriculum among key decision-making groups who will influence curricular change. (KC).

FORMAT: Position Paper, 28p.

AVAILABILITY: For a microfiche copy of this document order ED290954 from FEIS.

TITLE: ***Vocational/Technical Education for the 21st Century.***

DATE: 87.

AUTHOR: Houben, Ir. J. W. M. A.; Verbunt, Jan A.

ANNOTATION: Teacher education and teachers, particularly vocational and technical education teachers, must keep abreast of the trends and changes in the work force and employment needs around the world. Education must be geared toward helping individuals to explore their options and to continue learning throughout their life span. This flexibility is needed as the world becomes increasingly technological and concepts learned today become obsolete tomorrow. Four major

changes that may affect vocational education and training involve (1) the invalid expectation of continuous lifetime employment of all workers; (2) the need for a better theoretical understanding in certain fields; (3) a greater emphasis on human and social factors; and (4) informed technical education. Technology education can help pupils fulfill their individual potential, raise overall national levels of educational attainment, bring about greater equality of educational opportunity, and foster social and cultural cohesion. Basic conditions for such education include common standards for technology as an educational subject, standardization in electronic hardware and software, willingness of industrialized nations to assist developing nations, and cooperation between science- and work-related disciplines for the development of educational programs. (CB)

FORMAT: Information Analyses; Conference Paper; 21p.

AVAILABILITY: For a microfiche copy of this document order ED287806 from FEIS.

TITLE: **"We Must Educate Workers to Understand the Present."**

AUTHOR: Noble, Douglas D.

JOURNAL: *Change*; v16 n5 p27, 38-39 Jul-Aug 1984.

ANNOTATION: The theory that implies that the purpose of education is to enable people to continually adapt to an ever-changing labor market is examined. It is suggested that education designed to help people understand the present is the way to change the future. (MLW)

TITLE: ***Workers 45+: Today and Tomorrow.***

DATE: 86.

DEVELOPER: American Association of Retired Persons, Washington, DC.

ANNOTATION: The Bureau of Labor Statistics estimates that the median age of workers will rise from 34.8 years in 1982 to 37.3 years by 1995. In the 30 years between 1955 and 1985, the number of workers aged 45 and over has risen from 25 million to nearly 32 million. Workers over the age of 45 are established in all types of occupations. The number of men aged 45 to 64 is greatest in manufacturing and services, whereas that of women in the same age group is largest in trade and services. Labor force participation has dropped steadily for men over 45, whereas it has increased for their female counterparts. Working men between the ages of 45 and 64 earn more than the median for all men aged 16 and over, whereas women earn between 60 and 66 percent of their male counterparts. Women of all ages are more likely to work part-time (only 6 percent of men aged 45 to 64 versus 25 percent of women in the same age group). Race is an important factor, with a smaller percentage of minority men over 45 working than white men of comparable age and a larger percentage of minority women over 45 working than their white counterparts. Minority members and females experienced the highest unemployment rates, with minority males having the highest rates. The number of allegations of age discrimination has increased from 12,710 in 1981 to 21,635 in 1984 (a 71 percent increase). Many employers are already considering and implementing programs of interest to the more than 38 million workers who will be age 45 or over by 1995. (MN)

FORMAT: Research Report; Statistical Material; 24p.

AVAILABILITY: For a microfiche copy of this document order ED284058 from FEIS.

TITLE: **"Workforce 2000 Agenda Recognizes Lifelong Need to Improve Skills."**

AUTHOR: Brock, William E.

JOURNAL: *Monthly Labor Review*; v111 n2 p54-56, Feb 1988.

ANNOTATION: When William E. Brock became Secretary of the Department of Labor (DOL) in May 1985, he told employees that he hoped everyone could be open to new ideas and initiatives. There is a growing awareness that the world is changing rapidly and that the methods and concepts which worked well in the past must be rigorously reevaluated. The DOL contributed to a national dialogue on the relevant issues and questions that will determine the United States' economic future through a project called "Workforce 2000." The programs, policies, and issues that are part of "Workforce 2000" are based on DOL studies and projections of what kinds of jobs the economy will produce in the future and who will be available to perform them. The private sector must take the lead in worker training, but the government has to play a role as well. To improve the effectiveness of government efforts, the DOL's Workforce 2000 agenda includes a proposed new worker adjustment program.

TITLE: ***Workforce 2000: Work and Workers for the 21st Century.***

DATE: 87.

AUTHOR: Johnston, William B., And Others.

DEVELOPER: Employment and Training Administration (DOL), Washington, DC.

ANNOTATION: Four key trends will shape the American labor force in the final years of the 20th century. The American economy should grow at a relatively healthy pace. Despite its international comeback, however, U.S. manufacturing constitutes a much smaller share of the economy in the year 2000 than it does today. The work force will grow slowly, becoming older, more female, and more disadvantaged. The new jobs in service industries will demand much higher skills. These trends raise a number of important policy issues. If the United States is to continue to prosper, policymakers must find ways to accomplish the following: stimulate balanced world growth; accelerate productivity increases in service industries; maintain the dynamism of an aging work force; reconcile the conflicting needs of women, work, and families; integrate Black and Hispanic workers fully into the economy; and improve the educational preparation of all workers. Because of the uncertainty of long-range economic forecasts, three scenarios of the U.S. economy in the year 2000 have been devised. The first of these, the baseline or "surprise-free" scenario, calls for a modest improvement in the growth rate that the nation experienced between 1970 and 1985 but not a return to the boom times of the 1950s and 1960s. The "world deflation" scenario focuses on the possibility that a worldwide glut of labor and production capacity in food, minerals, and manufactured goods could lead to a sustained deflation and sluggish economic growth. The third scenario, the "technology boom," postulates a powerful rebound in U.S. economic growth to levels that are comparable with the first two decades after World War II. (MN)

FORMAT: Book; Research Report; 143p.

AVAILABILITY: For a microfiche copy of this document order ED290887 from FEIS.

TITLE: ***Work Now and in the Future, 3. Proceedings from the Annual Conference for Business and Industry Representatives, Educators, and Others Concerned with the Changing World of Work (3rd, Portland, Oregon, November 5-6, 1986).***

DATE: 86

AUTHOR: McClure, Larry; Cotton, Kathleen, Ed

DEVELOPER: Office of Educational Research and Improvement (ED), Washington, DC

ANNOTATION: These proceedings of a conference, which focused on technology and communications in tomorrow's workplace, include the following: synopses of "Learning for Life: Increasing Awareness of Human Capabilities" and the follow-up session "Multiplying Intelligence: What Do We Know about Learning Styles?" (Dee Dickinson); "From Programmed Instruction to Laser Videodiscs: What I've Learned after 30 Years at IBM" (Harvey Long); a banquet speech on the space program in relation to education (David Marquart); a session on distance education and its use of telecommunications and video technologies; a session on new skills needed for occupational success (chaired by David Allen); a presentation entitled "Behind the Scenes at the Sheraton" (Helen Moore); a luncheon speech on high-tech applications in the news industry (Paul Glancy); five descriptions of programs to prepare students to communicate in the workplace (Bennie Lucroy et al.); a presentation on teaching young people to become decision makers (Owen Thompson); a presentation on the "Principles of Technology" curriculum (Leno Pedrotti) followed by a panel on the subject, "Technology in the Middle School Years: Whatever Happened to Building Birdhouses in Junior High?" (Sam Stern et al.); "A New Approach to Technology Education, K-12: The Bellevue Model" (Roger Wing et al.); "A New Approach to Technology Education, K-12: The Yakima Model" (Jim Merz); a presentation on the Business Equipment Systems Technology program (Don Wardwell); "Promising Practices for High-risk Youth in the Northwest Region: Initial Search" (Karen Green); "At-risk Youth: Oregon's Response" (Kent McGuire, moderator); a session on the Summer Training and Employment Program (Kurt Shovlin et al.); a presentation on the Financial Services Academy (Julie Crossley et al.); "Transition Skills for Youth with Special Needs" (Jane Dowling et al.); a session on career redirection problems, needs, and resources; a demonstration of MICRO-SKILLS (Susan Roudebush); a session on cooperative work experience; "What's New in Apprenticeship?" (Jeff Triplett); a panel on drug testing; an overview of illiteracy in the workplace (Beret Harmon); "Using Vocational Materials to Develop Reading Skills" (Delores Tadlock); a session on integration of academic and vocational education; "Career Planning in the High School: Helping Students Look Ahead" (Dale Arneson, Bruce McKinlay); "How Your Agency Can Test New Materials: A National Effort to Use Products of Research" (Jay Smink); a panel on teacher preparation; "Customized Training Resources: A Blueprint for Expansion and Growth"; a session on regional planning for articulated vocational education programs; a description of Project 2001 (Bob Lehman); "An Insider's Look at Planning for the Future" (Eugene Eschbach); and "Image Building: Lessons for Education and Training from Leading Northwest Companies" (Mark Milleman et al.). The proceedings conclude with a review of the conference and participants' evaluation. (YLB)

FORMAT: Conference Proceedings; Position Paper; 47p

AVAILABILITY: For a microfiche copy of this document order ED277834 from FEIS

TITLE: ***The Workplace in 1997. Working Paper 1987, 2.***

DATE: 87

AUTHOR: Levitan, Sar A.

ANNOTATION: Will there be radical changes in the workplace by 1997? Four predictions, two full of gloom and doom and two full of promise, are common in current literature. One recent theory holds that we are facing a polarization of American society through the erosion of the middle class. Another gloomy prediction suggests that not only is the middle class eroding, but also that there will be no work for an increasingly large proportion of those seeking work—jobs will be filled by robots. A more hopeful notion is that eliminating government regulations will boost productivity; another is that the nation is about to enter a new era of labor-management cooperation. None of these ideas has much substance, although they may be based on some fact. Rather, each serves some special interests. The actual nature of the workplace in 1997 will probably be not much different than it is today. Change comes slowly and will continue to do so. Some predictions for the future are that business cycles producing recessions will continue to occur; that the work force will continue to grow through fewer young people going to college and more older people working longer; and that technology will bring about job change, but will not bring about an extraordinary demand for new skills. At the same time, workers have changed; they are more educated and have a different family structure. These workers will need different labor-management structures. On the whole, however, the decade will not see radical changes in the workplace. Change takes much time and enormous amounts of capital, and much longer than 10 years will be needed to make an impact. (KC)

FORMAT: Position Paper; 17p

AVAILABILITY: For a microfiche copy of this document order ED284052 from FEIS

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